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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,531	04/02/2001	Earl Hennenhoefer	01-40064-US	9420

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Louis M. Heidelberger, Esq.,
REED SMITH LLP
2500 One Liberty Place
1650 Market Street
Philadelphia, PA 19103-7301

EXAMINER	
MA, JOHNNY	

ART UNIT	PAPER NUMBER
2614	15

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/824,531	HENNENHOEFER ET AL.	
	Examiner	Art Unit	
	Johnny Ma	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 March 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 8-12, filed 11/21/2003, with respect to the rejection(s)of claim(s) 1-5 under 35 U.S.C. § 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references as discussed below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 3, and 4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the application as originally filed does not provide support for distributing modulated single frequency RF signals onto a wideband signal distribution system wherein "said at least one intelligent device including an RF splitter suitable for distribution said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF

modulated signal, and at least one modulator electrically connected to said RF splitter and suitable for modulating at least the IP signal portion split by said RF splitter."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 2 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Flickner et al. (US 2001/0037512 A1).

As to claim 2, note the Flickner et al. reference which discloses a signal interface for a bi-directional communication device. The claimed "wideband signal distribution system including 568 standard wiring for distributing a plurality of non-IP, RF modulated signals" are met by "single RF band is received from the coaxial cable network 18 via an RF connector/interface 58. It is assumed that the single RF band includes video signals and DOCSIS signals from the head end" (Flickner et al. [0033]), note that coaxial cable is recognized as a cabling choice in the 568 wiring standard. The claimed "at least one intelligent device for demodulating single frequency carrier RF signals off of said wideband signal distribution system" is met by system 36 of Figure 34. The claimed "wherein said single frequency RF signals comprise IP digital information" is met by "...single RF band includes video signals and DOCSIS signals from the head end" (Flickner et al. [0033]). The claimed "said at least one intelligent device including an RF splitter

suitable for receiving said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal" are met by splitter 66, DOCSIS Tuner 60, and Analog/Digital Video Tuner 68 (see Figure 4). The claimed "and at least one demodulator electrically connected to said RF splitter and suitable for demodulating at least the IP signal portion split by said RF splitter" is met by "...splitter 66 has a first output port 64 to which is coupled a DOCSIS tuner...DOCSIS tuner includes appropriate circuitry/logic in accordance with the DOCSIS specification to receive and tune DOCSIS signals" (Flickner et al. [0033]). Although the Flickner et al. reference does not specifically disclose a demodulator in DOCSIS tuner, nevertheless the examiner submits a demodulator is inherent to the operation of the tuner.

As to claim 5, note the Flickner et al. reference which discloses a signal interface for a bi-directional communication device. The claimed "wideband signal distribution system for distributing a plurality of non-IP, RF modulated signals" is met by "single RF band is received from the coaxial cable network 18 via an RF connector/interface 58. It is assumed that the single RF band includes video signals and DOCSIS signals from the head end" (Flickner et al. [0033]). The claimed "at least one intelligent device for demodulating single frequency carrier RF signals off of said wideband signal distribution system" is met by system 36 of Figure 34. The claimed "wherein said single frequency RF signals comprise IP digital information" is met by "...single RF band includes video signals and DOCSIS signals from the head end" (Flickner et al. [0033]). The claimed "said at least one intelligent device including an RF splitter suitable for receiving said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal" are met by splitter 66, DOCSIS Tuner 60, and Analog/Digital Video Tuner 68 (see Figure 4). The claimed "and at least one demodulator electrically connected to said RF

splitter and suitable for demodulating at least the IP signal portion split by said RF splitter" is met by "...splitter 66 has a first output port 64 to which is coupled a DOCSIS tuner...DOCSIS tuner includes appropriate circuitry/logic in accordance with the DOCSIS specification to receive and tune DOCSIS signals" (Flickner et al. [0033]). Although the Flickner et al. reference does not specifically disclose a demodulator in DOCSIS tuner, nevertheless the examiner submits a demodulator is inherent to the operation of the tuner. The claimed "wherein said at least one intelligent device uses an existing media control access layer of the network in order to control the sharing of media channels among multiple addressable devices in the system" is met by the use of DOCSIS, where the specification includes a MAC protocol.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutton, Jr. (US 5,968,118) in further view of Klein (US 6,637,030 B1).

As to claim 2, note the Sutton, Jr. reference which discloses an information outlet and industrial set top functionality. The claimed "wideband signal distribution system including 568 standard wiring for distributing a plurality of non-IP, RF modulated signals" is met by "...coax wire 56 is used to multiplex all of the signals which are required by the user in the location 54...signals which are sent over the coax cable 56 include video signals from a video monitor or a conventional TV receiver 68" (Sutton, Jr. 3:43-47), note that coaxial cable is recognized as a

cabling choice in the 568 wiring standard. The claimed "at least one intelligent device for demodulating single frequency carrier RF signals off of said wideband signal distribution system" is met by "...information outlet 52 contains the electronics needed for several modulators and demodulators" (Sutton, Jr. 3:13-15). The claimed wherein said single frequency RF signals comprises digital information are met by "[o]ther signals, which may be sent bidirectionally, between the information outlet 52 and the junction box 60, include telephone signals from a telephone 72 or telephone head end 22, data signals from a computer or terminal device 74 or server 20, and infrared signals from a remote control unit 76 (Sutton, Jr. 3:50-55) where the disclosed telephone, computer, and server are intelligent peripherals. However, the Sutton, Jr. reference is silent as to the operation of the modulators and demodulators within the disclosed information outlet. Now note the Klein reference which discloses a broadband cable television and computer network. The claimed "said at least one intelligent device including an RF splitter suitable for receiving said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal, and at least one demodulator electrically connected to said RF splitter and suitable for demodulating at least the IP signal portion split by the RF splitter" is met by "...is routed to a first tunable receiver/demodulator 70 having a frequency range of approximately 50 to 750 MHz. This receiver additionally may comprise one or more demodulators for retrieving NTSC or Pal encoded video from the cable television service, FM audio signals, and also for recovering digital data from, for example, cable service provided Internet access" (Klein 8:1-9). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Sutton, Jr. information outlet with demodulators and modulators with the Klein coupling and

splitting of different signals to their respective demodulators for the purpose of providing the correct signal to each output of the wall mounted information outlet where various media and data signals can be sent over a single coaxial line.

As to claim 5, note the Sutton, Jr. reference which discloses an information outlet and industrial set top functionality. The claimed "wideband signal distribution system for distributing a plurality of non-IP, RF modulated signals" is met by "...coax wire 56 is used to multiplex all of the signals which are required by the user in the location 54...signals which are sent over the coax cable 56 include video signals from a video monitor or a conventional TV receiver 68" (Sutton, Jr. 3:43-47), note that coaxial cable is recognized as a cabling choice in the 568 wiring standard. The claimed "at least one intelligent device for demodulating single frequency carrier RF signals off of said wideband signal distribution system" is met by "...information outlet 52 contains the electronics needed for several modulators and demodulators" (Sutton, Jr. 3:13-15). The claimed wherein said single frequency RF signals comprises digital information are met by "[o]ther signals, which may be sent bidirectionally, between the information outlet 52 and the junction box 60, include telephone signals from a telephone 72 or telephone head end 22, data signals from a computer or terminal device 74 or server 20, and infrared signals from a remote control unit 76 (Sutton, Jr. 3:50-55) where the disclosed telephone, computer, and server are intelligent peripherals. The claimed "wherein said at least one intelligent device uses an existing media control access layer of the network in order to control the sharing of media channels among multiple addressable devices in the system" is met by the disclosed Sutton, Jr. bi-directional signaling (Sutton, Jr. 3:50-55). Although the Sutton, Jr. reference does not specifically disclose the use of a media control access layer the

examiner submits that a MAC is inherent to the disclosed system in order to facilitate the flow of data between connected devices. However, the Sutton, Jr. reference is silent as to the operation of the modulators and demodulators within the disclosed information outlet. Now note the Klein reference which discloses a broadband cable television and computer network. The claimed "said at least one intelligent device including an RF splitter suitable for receiving said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal, and at least one demodulator electrically connected to said RF splitter and suitable for demodulating at least the IP signal portion split by the RF splitter" is met by "...is routed to a first tunable receiver/demodulator 70 having a frequency range of approximately 50 to 750 MHz. This receiver additionally may comprise one or more demodulators for retrieving NTSC or Pal encoded video from the cable television service, FM audio signals, and also for recovering digital data from, for example, cable service provided Internet access" (Klein 8:1-9). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Sutton, Jr. information outlet with demodulators and modulators with the Klein coupling and splitting of different signals to their respective demodulators for the purpose of providing the correct signal to each output of the wall mounted information outlet where various media and data signals can be sent over a single coaxial line.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Dinwiddie et al. reference (US 6,481,013 B1) discloses an entertainment and computer coaxial network and method of distributing signals therethrough.

The Hamlin reference (US 5,574,964) discloses a signal distribution system.

The Carr et al. reference (US 5,608,446) discloses an apparatus and method for combining high bandwidth and low bandwidth data transfer.

The Safadi reference (US 5,572,517) discloses a configurable hybrid medium access control for cable metropolitan area networks.

The Datari reference (US 6,418,169 B1) discloses a system for prioritizing bi-directional broadcast data.

The Thacker reference (US 6,011,548) discloses a system for integrating satellite boardband data distributed over a cable tv network with legacy corporate local area networks.

The Jeffery reference (US 6,567,981 B1) discloses a audio/video signal redistribution system.

The Fujii et al. reference (US 6,477,179 B1) discloses a data receiving device and data receiving method.

The Humpleman reference (US 6,005,861) discloses a home multimedia network architecture.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (703) 305-8099. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-HELP.

jm

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600